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Date: June 21, 2016

To: Mr. Bob Walker, Executive Director
Brunswick Regional Water & Sewer H2GO

From: Lex Warmath and Elaine Conti, Raftelis Financial Consultants, Inc.

Re: Economic Feasibility Study for Reverse Osmosis Water Treatment Plant – Summary of Analysis and Key Assumptions

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I. Introduction

This memorandum summarizes the results of the economic feasibility study (Study) prepared by Raftelis Financial Consultants, Inc. (RFC) to evaluate the feasibility of constructing a new reverse osmosis water treatment plant (RO WTP) by Brunswick Regional Water & Sewer H2GO ("H2GO") rather than continuing to purchase potable water from Brunswick County. To conduct the analysis, RFC updated the rate and financial planning model (Model) that was developed by RFC in 2013. For the 2013 study, RFC developed a Model which was designed to 1) forecast rate adjustments and customer impacts over a 20-year period based on H2GO's costs 2) assess the economic feasibility of building a RO WTP as opposed to purchasing water, and 3) provide a tool for H2GO staff to use with future rate updates and financial forecasts for issuing debt. At the time of the original study in 2013, capital and operations and maintenance costs associated with the proposed RO WTP were very preliminary. Since the last study, H2GO's engineer, the Wooten Company (Wooten), has had time to gather and refine cost and water production data from the pilot reverse osmosis plant and two production wells. H2GO requested that RFC update the Model with more recent cost information regarding the RO WTP and to refresh the economic feasibility analysis. The results of the Study were discussed with the Board of Commissioners (Board) at a workshop held on June 8, 2016. This memorandum reflects the information provided to the Board and discussed at the workshop.

II. Study Assumptions

The study is based on several key assumptions and information provided by several parties. The study period is from FY 2017 through FY 2038, which reflects the anticipated term of loans issued for the construction of the water treatment plant. The key assumptions and data sources are as follows:

- **Cost of RO WTP –** The estimates for the capital costs to construct the RO WTP were provided by Wooten. The total construction costs (as shown later in the 5-year capital improvement plan)

are approximately $27 million, but H2GO has existing reserves to apply to the construction costs such that the total amount of construction costs to be financed through loans is assumed to be $23.5 million. Based on discussions between H2GO staff and banking representatives, anticipated bank loans for the RO WTP would have a term of 20 years and an interest rate between 2% and 2.5%, with 2.5% used in the Model.

- **Cost to operate and maintain the RO WTP -** The estimates for the costs to operate and maintain (O&M) the RO WTP were provided by Wooten. To project O&M costs into the future, electricity costs were assumed to increase by 0.4% per year (based on the historic 10-year average in actual electricity costs for H2GO) through FY 2026, and thereafter were assumed to increase by 2% per year, and chemical costs were assumed to increase by 2% per year. Since electricity and chemical costs also vary with production levels, these costs were also adjusted by projected increases in the level of water produced. All other costs were assumed to increase by a flat rate of 3% per year. Because of the projected growth in water production (explained below), the annual increase in O&M costs for the RO WTP over the forecast period are approximately 3.5% per year.
- **Amount of water produced –** The estimates for water production were developed based on consultations with H2GO staff and Wooten and are based on applying projected increases in the number of water customers and historic average use per customer per day to the projected number of water customers. AS a result, water produced is anticipated to increase by 3.7% per year through FY 2025, thereafter increasing by 2% per year.

Build WTP				
WTP Bonds:				
Project Costs - 1st loan	$	12,000,000	2017 issue	
Project Costs - 2nd loan	$	11,500,000	2018 issue	
Subtotal: Project Costs	$	23,500,000		
Term of loan		20		
Interest Rate		2.5%	**Annual**	**Escalation**
			2017 - 2026	**> 2026**
WTP O&M		**2019**		
Electric costs	$	355,080	**0.4%**	**1.5%**
Chemical Costs	$	111,250	**2.0%**	**2.0%**
All other costs	$	484,670	**3.0%**	**3.0%**
	$	951,000	**2017 - 2025**	**> 2025**
Annual escalation in water production			**3.7%**	**2.0%**

- **Escalation Factors for H2GO's other costs -** H2GO's proposed FY 2017 budget for the water system was escalated over the forecast period. Each line item in the budget was grouped into one of the cost categories shown below with the corresponding escalation factor. The escalation

factors for chemicals, electricity and "other" are the same as the escalation rates used for escalating similar O&M costs for the RO WTP.

- **Escalation Factors for Offsets –** Offsets are revenues generated from items other than water sales. These include revenues from late payment penalties, interest earned, capital recovery fees, impact fees, etc. Capital recovery fees and impact fees are fees collected for new customers connecting to the water system and therefore these offsets are anticipated to escalate at the same rate as the projected increase in new customers, which is 3.7% per year through FY 2025 and 2% per year thereafter. To be conservative, all other offsets are assumed to remain unchanged over the forecast period.

Escalation of Expenses	Annual	
Salaries	3%	
Insurance	5%	
Chemicals	2%	
Utilities	1%	
Other	3%	
Escalation of Offsets	**2017-2025**	**> 2025**
Capital Recovery Fees	3.7%	2.0%
Impact Fees	3.7%	2.0%
Other	0.0%	0.0%

- **Growth assumptions for the number of customers (meters) and water consumption –** As mentioned previously, water production is anticipated to escalate at 3.7% per year through FY 2025 and 2% per year thereafter. The projections for water produced, or purchased, is based on multiplying the historic average use per customer per day times the projected number of water customers. In other words, the same growth assumptions are used in the number of customers and water consumption.

Growth Assumptions for Water Meters and Consumption:	**FY 17 - FY 25**	**> FY 2025**
Residential	3.7%	2.0%
Irrigation	3.7%	2.0%
Commercial	3.7%	2.0%

- **Escalation Factors for the Amount of Water Purchased From Brunswick County and Wholesale Rates –** Water purchased from Brunswick County is assumed to escalate as the same rate as water production, 3.7% per year through FY 2025 and 2% per year thereafter. The wholesale agreement between H2GO and Brunswick County allows Brunswick County to increase

the wholesale rate each year by the Producer Price Index (PPI). The wholesale rate to be paid to Brunswick County is assumed to increase by 1.7% through FY 2020 which is based on projections of wholesale rates from the Brunswick County Bond Feasibility Study prepared by RFC in 2014. These estimates were provided by Brunswick County staff at the time the Feasibility Study was being prepared. (The historical average increase in wholesale rates assessed by Brunswick County from 2011 to 2016 was approximately 1.65% per year). After FY 2020, the wholesale rate is assumed to increase by 2.2% which is derived from the average of the most recent historic 10-year annual average (2.5%) and the 5-year annual average (1.9%) of the PPI.

	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
	Actual	Actual	Actual	Actual	Actual	Estimated	Forecast	Forecast	Forecast	Forecast	Forecast
Purchases from Brunswick County (kgal)	633,824	571,776	534,776	562,990	550,520	608,740	631,263	654,620	678,841	703,958	730,005
% Change		-9.8%	-6.5%	5.3%	-2.2%	10.6%	3.7%	3.7%	3.7%		
Actual or Estimated Wholesale Rate Assessed by BC	$ 2.58	$ 2.76	$ 2.76	$ 2.76	$ 2.82	$ 2.80	$ 2.85	$ 2.90	$ 2.95	$ 3.00	$ 3.06
Escalated by PPI Index	*5.3%*	*7.0%*	*0.0%*	*0.0%*	*2.2%*	*-0.7%*	*1.7%*	*1.7%*	*1.7%*	*1.7%*	*2.2%*
2017 - 2020	**1.7%** based on projections of wholesale rates from Brunswick County Feasibility Study prepared by RFC in 2014										
> 2020	**2.2%** based on average of historic 10-year annual average (2.5%) and 5-year annual average (1.9%) of the PPI										

History of Brunswick County wholesale and retail rate increases, PPI increases, and other data points.

History of Wholesale rates assessed by Brunswick County per kgal

FY	Rate	% change	
FY 2002	$ 2.80		
FY 2003	$ 2.80	0.0%	
FY 2004	$ 2.32	-17.1%	76%
FY 2005	$ 2.25	-3.0%	74%
FY 2006	$ 2.21	-1.8%	72%
FY 2007	$ 2.31	4.5%	76%
FY 2008	$ 2.40	3.9%	79%
FY 2009	$ 2.57	7.1%	84%
FY 2010	$ 2.45	-4.7%	80%
FY 2011	$ 2.58	5.3%	85%
FY 2012	$ 2.76	7.0%	90%
FY 2013	$ 2.76	0.0%	90%
FY 2014	$ 2.76	0.0%	90%
FY 2015	$ 2.82	2.2%	92%
FY 2016	$ 2.80	-0.7%	92%
Average 2002 - 2015		**0.3%**	
10 year avg. ('06-'15)		**2.4%**	
5 year avg. ('11-'15)		**2.9%**	
avg. after 2004		**1.6%**	

History of PPI for "Finished Goods" as of MAY of each year

FY	PPI Index	% change
FY 2001	142.2	
FY 2002	138.3	-2.7%
FY 2003	141.7	2.5%
FY 2004	148.6	4.9%
FY 2005	153.9	3.6%
FY 2006	160.5	4.3%
FY 2007	166.5	3.7%
FY 2008	178.5	7.2%
FY 2009	170.4	-4.5%
FY 2010	178.9	5.0%
FY 2011	191.0	6.8%
FY 2012	192.4	0.7%
FY 2013	197.0	2.4%
FY 2014	201.7	2.4%
FY 2015	195.8	-2.9%
FY 2016		
Average 2002 - 2015		**2.4%**
10 year avg. ('06-'15)		**2.5%**
5 year avg. ('11-'15)		**1.9%**

BC Retail Rate History

	Base	Volumetric	Avg cust bill	% Change
FY 2001				
FY 2002			@ 4 kgal	
FY 2003	$ 11.00	$ 3.25	$ 24.00	
FY 2004	$ 11.00	$ 3.05	$ 23.20	-3.3%
FY 2005	$ 11.00	$ 3.05	$ 23.25	0.2%
FY 2006	$ 11.00	$ 3.05	$ 23.25	0.0%
FY 2007	$ 11.00	$ 3.05	$ 23.25	0.0%
FY 2008	$ 11.00	$ 3.05	$ 23.25	0.0%
FY 2009	$ 11.00	$ 3.05	$ 23.25	0.0%
FY 2010	$ 11.00	$ 3.05	$ 23.25	0.0%
FY 2011	$ 11.00	$ 3.05	$ 23.25	0.0%
FY 2012	$ 11.00	$ 3.05	$ 23.25	0.0%
FY 2013	$ 11.00	$ 3.05	$ 23.25	0.0%
FY 2014	$ 11.00	$ 3.05	$ 23.25	0.0%
FY 2015	$ 12.00	$ 3.05	$ 24.25	4.3%
FY 2016	$ 12.00	$ 3.05	$ 24.25	0.0%
10 year average				**0.4%**
5 year average				**0.9%**

BC History of Water Use

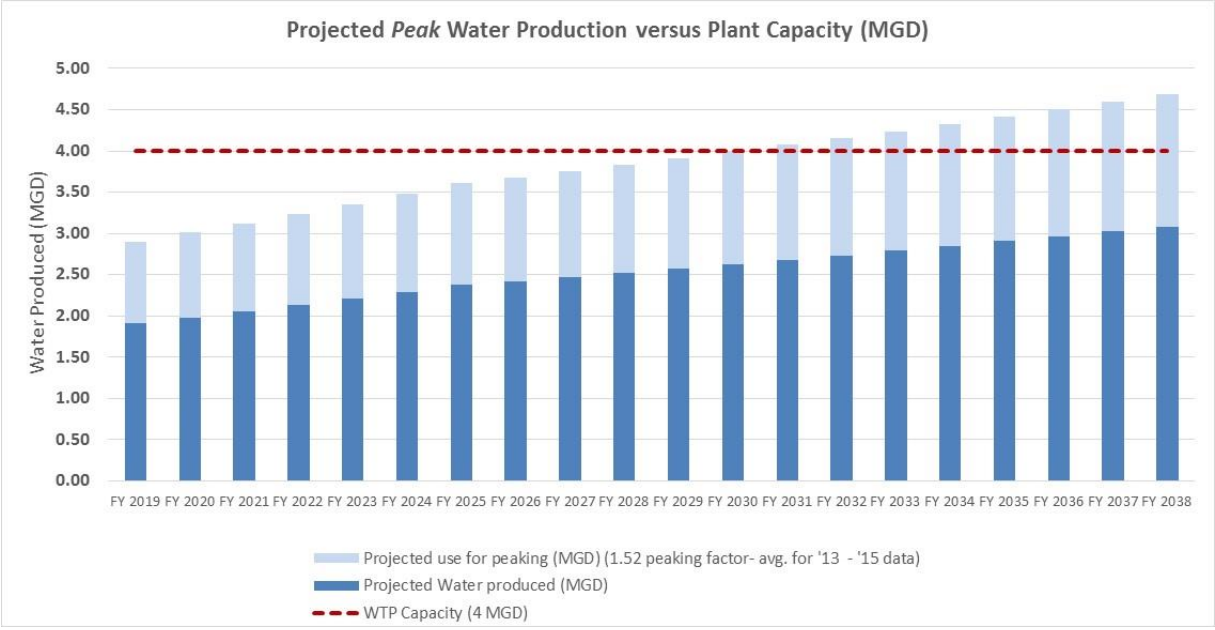
	Retail (with irrig.)	Wholesale
2006	1,190,093	1,710,807
2014	1,952,319	1,602,758
annual % change	**8.0%**	**-0.8%**
% of total flow in 2014	**44.0%**	**36.0%**
% of total revenues	**63.0%**	**24.0%**

- **Assumptions Regarding the CIP –** H2GO prepares a 5-year capital improvement plan (CIP) which was incorporated into the feasibility analysis. Beyond the 5-year CIP, the only project included, based on H2GO's input, is an Aquifer Storage Recover (ASR) project. H2GO has adequate reserves to fund all the projects on the CIP, with the exception of the $23.5 million of costs for the RO WTP which will be funded with loans, as discussed earlier. As shown in the chart that compares projected demand versus plant capacity, projected peak day demand (based on monthly billing data which suggests a peak day demand factor of 1.52 times average day

demand) will exceed the initial capacity at the RO WTP of 4.0 million gallons per day (MGD) beginning in FY 2031 and beyond. H2GO staff indicated that the expectation is that the ASR project will provide a mechanism to address this issue.

SUMMARY -Total CIP Projects:	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025
Administration	$ 86,100	$ 5,000	$ 5,000	$ 5,000	$ 5,000	$ -	$ -	$ -	$ -
Water Distribution	$ 50,000	$ 765,000	$ 2,420,000	$ 46,000	$ 46,000	$ -	$ -	$ -	$ -
Wastewater Collections	$ 515,000	$ 15,000	$ 15,000	$ 15,000	$ 15,000	$ -	$ -	$ -	$ -
Wastewater Treatment	$ 3,000	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Fund 25 - 18" Water Transmission Main	$ 2,119,510	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Fund 26 - RO Water Treatment Plant	$ 26,978,340	$ 150,000	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Projected ASR projects	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 3,000,000
Fund 46 - US17 Regional Pump Station & Interceptor Sewer	$ 1,882,000	$ 1,557,000	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Fund 60 - Compass Pointe Infrastructure Fund	$ 596,420	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
TOTALS - CIP Projects	**$ 32,230,370**	**$ 2,492,000**	**$ 2,440,000**	**$ 66,000**	**$ 66,000**	**$ -**	**$ -**	**$ -**	**$ 3,000,000**

FUNDING of CIP Projects	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025
From Fund Balance									
Administration	$ 86,100	$ 5,000	$ 5,000	$ 5,000	$ 5,000	$ -	$ -	$ -	$ -
Water Distribution	$ 50,000	$ 765,000	$ 2,420,000	$ 46,000	$ 46,000	$ -	$ -	$ -	$ -
Wastewater Collections	$ 515,000	$ 15,000	$ 15,000	$ 15,000	$ 15,000	$ -	$ -	$ -	$ -
Wastewater Treatment	$ 3,000	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Fund 25 - 18" Water Transmission Main	$ 2,119,510	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Fund 26 - RO Water Treatment Plant	$ 3,478,340	$ 150,000	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Projected ASR projects									$ 3,000,000
Fund 46 - US17 Regional Pump Station & Interceptor Sewer	$ 1,882,000	$ 1,557,000	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Fund 60 - Compass Pointe Infrastructure Fund	$ 596,420	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
	$ 8,730,370	**$ 2,492,000**	**$ 2,440,000**	**$ 66,000**	**$ 66,000**	**$ -**	**$ -**	**$ -**	**$ 3,000,000**
From Debt Service	$ 23,500,000								
From Revenues from Rates									
	$ -	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**
Totals - Funding of CIP Projects	**$ 32,230,370**	**$ 2,492,000**	**$ 2,440,000**	**$ 66,000**	**$ 66,000**	**$ -**	**$ -**	**$ -**	**$ 3,000,000**



III. Study Results

The study focused on comparing two options for meeting projected demand for potable water:

Option 1 involved H2GO not building the RO WTP and instead remaining a wholesale customer of Brunswick County; and

Option 2 involved H2GO building its own RO WTP.

To determine the feasibility of building the RO WTP, two key measures were calculated:

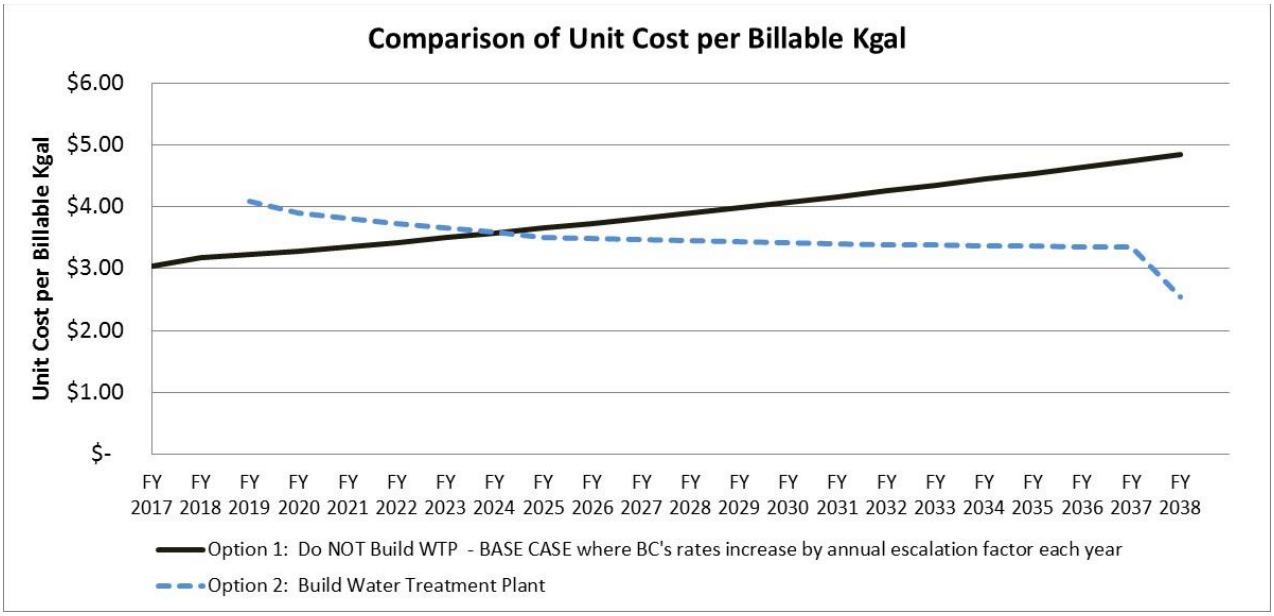
- The **net present value** (NPV) of the annual costs to provide potable water either by purchasing water from Brunswick County or by building and operating the RO WTP (excludes costs for water transmission and delivery) over a 22-year planning period, through 2038 when the bonds to build the RO WTP would be retired.
- The **average unit cost**, which is the annual costs divided by projected billable water use.

Additional information that was reviewed to determine the feasibility of both options included the following:

- **Annual Cost Comparison** which are the costs to buy water from Brunswick County versus the costs to produce the water by building and operating the RO WTP
- Water **rate increases** needed over the forecast period
- **Cumulative surpluses** which result from revenues exceeding expenses (and do not reflect any revenues from capital recovery fees or impact fees)
- **Debt Service Coverage –** defined as annual revenues less total system O&M, divided by annual debt service, which indicates the utility's ability to pay creditors

As shown in charts below, using the assumptions described earlier, the results of the feasibility study indicate that the net present value and the average unit cost are more favorable over the long-term under Option 2 – build the RO WTP. Option 2 also results in higher cumulative cash surpluses and can be accomplished without additional water rate increases above the current rates. It should be noted that minor rate increases are projected for Scenario 1 (don't build plant) in the later years of the forecast. However, the surpluses generated in prior years are assumed to be used in the Model to offset rate increases required in later years, which has an impact on the cumulative cash surpluses generated under Option 1.

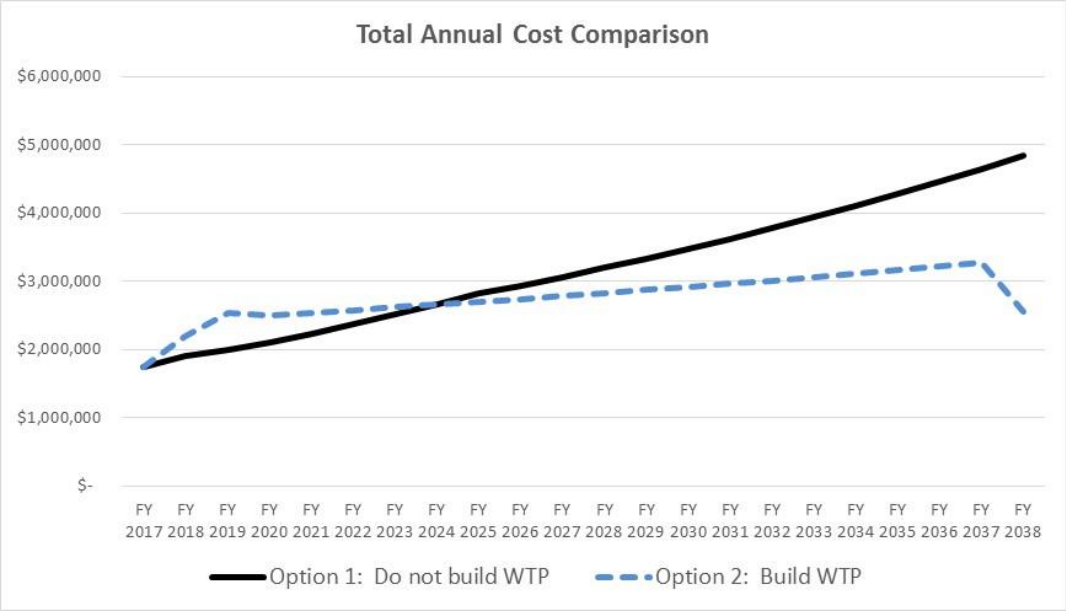
	FY 2017 - 2038	
OPTION	**Net Present Value of Costs**	**Cumulative Cash Surpluses**
Option 1 : Don't Build Plant	$ 38,275,880	$ 8,416,998
Option 2: Build Plant	$ 35,073,935	$ 17,847,806

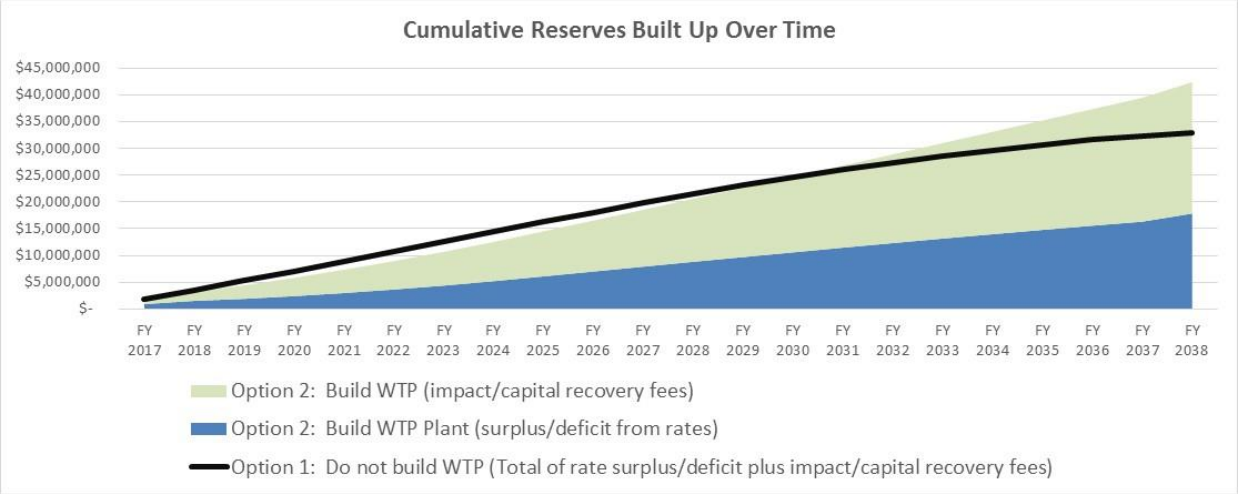


Annual Cost Comparison

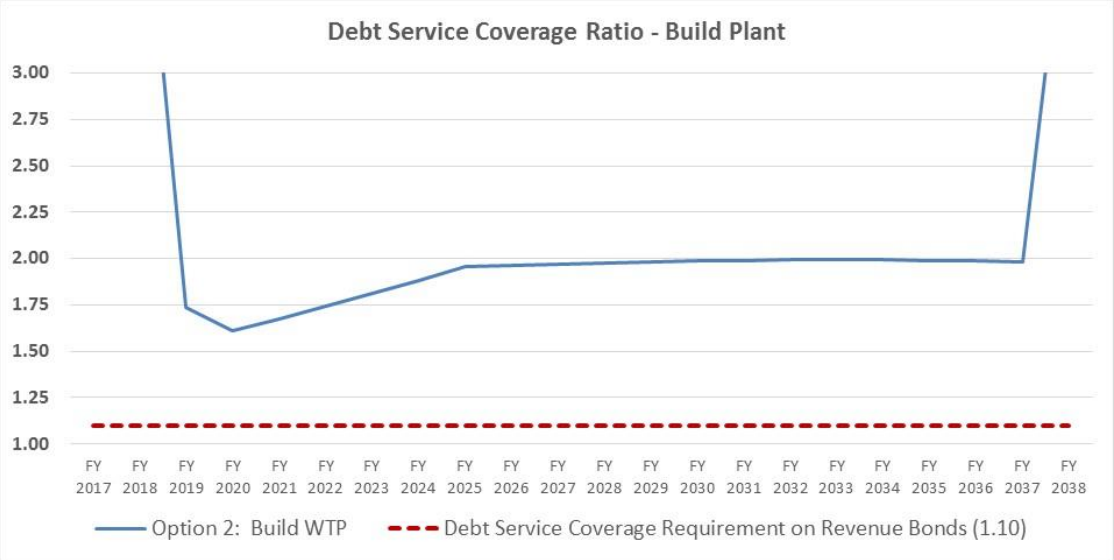
	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028
Option 1: Do not build WTP												
Water purchase costs	$ 1,750,000	$ 1,897,886	$ 2,001,451	$ 2,110,673	$ 2,236,499	$ 2,369,833	$ 2,511,123	$ 2,660,845	$ 2,819,501	$ 2,939,689	$ 3,065,004	$ 3,195,665
Option 2: Build WTP												
O&M Costs to Run WTP	$ 1,750,000	$ 1,897,886	$ 1,476,225	$ 986,482	$ 1,023,366	$ 1,061,708	$ 1,101,572	$ 1,143,021	$ 1,186,122	$ 1,220,751	$ 1,261,734	$ 1,304,110
Debt Service Costs for WTP	$ -	$ 300,000	$ 1,053,351	$ 1,519,495	$ 1,519,796	$ 1,520,105	$ 1,520,421	$ 1,520,745	$ 1,521,077	$ 1,521,418	$ 1,521,767	$ 1,522,124
	$ 1,750,000	$ 2,197,886	$ 2,529,576	$ 2,505,978	$ 2,543,162	$ 2,581,813	$ 2,621,993	$ 2,663,766	$ 2,707,199	$ 2,742,169	$ 2,783,500	$ 2,826,234
Additional Costs/(Savings)	$ -	$ 300,000	$ 528,125	$ 395,304	$ 306,663	$ 211,980	$ 110,870	$ 2,921	$ (112,302)	$ (197,520)	$ (281,504)	$ (369,431)

	FY 2029	FY 2030	FY 2031	FY 2032	FY 2033	FY 2034	FY 2035	FY 2036	FY 2037	FY 2038	TOTALS
Option 1: Do not build WTP											
Water purchase costs	$ 3,331,900	$ 3,473,947	$ 3,622,054	$ 3,776,478	$ 3,937,490	$ 4,105,371	$ 4,280,413	$ 4,462,923	$ 4,653,219	$ 4,851,633	**$ 70,053,597**
Option 2: Build WTP											
O&M Costs to Run WTP	$ 1,347,928	$ 1,393,238	$ 1,440,091	$ 1,488,540	$ 1,538,640	$ 1,590,449	$ 1,644,025	$ 1,699,430	$ 1,756,727	$ 1,815,981	**$ 31,128,026**
Debt Service Costs for WTP	$ 1,522,491	$ 1,522,867	$ 1,523,252	$ 1,523,647	$ 1,524,052	$ 1,524,467	$ 1,524,892	$ 1,525,328	$ 1,525,774	$ 737,692	**$ 29,494,759**
	$ 2,870,419	$ 2,916,105	$ 2,963,343	$ 3,012,187	$ 3,062,692	$ 3,114,916	$ 3,168,917	$ 3,224,758	$ 3,282,501	$ 2,553,673	**$ 60,622,786**
Additional Costs/(Savings)	$ (461,481)	$ (557,842)	$ (658,711)	$ (764,291)	$ (874,798)	$ (990,455)	$ (1,111,496)	$ (1,238,165)	$ (1,370,718)	$ (2,297,960)	**$ (9,430,811)**





Note: The reserves shown are from excess revenues generated through rates and from capital recovery/impact fees. They do not include the existing beginning balance or any CIP projects funded with reserves.



IV. Sensitivity Analysis

As shown previously, the NPV for Option 2 (build the RO WTP) is approximately $3.2 million less than the NPV of Option 1, which indicates that Option 2 is more favorable because it will cost H2GO less over the forecast period. RFC used the model to perform sensitivity analyses to identify which assumptions had the largest impacts on the results, specifically the net present value of costs. RFC also identified which assumptions could make the NPV for each option equal, meaning the options are equally cost effective. The assumptions evaluated as part of the sensitivity analysis included:

- The construction costs of the plant;
- The interest rate for the loans used to finance the RO WTP;
- The annual O&M costs escalators for the RO WTP;
- Annual growth projections for water production, water use, and number of customers;
- The starting point for the amount of water purchased from Brunswick County; and
- The annual cost escalation in the Brunswick County wholesale rate.

The analysis is most sensitive to assumptions regarding growth projections for water production and the starting point for water purchases from Brunswick County. For example, if the annual growth in water production is reduced from 2.7% (the average of 3.7% through 2025 and 2% thereafter) to 2.15%, the NPV of the two options become equal. The same is true if the starting point for water purchases from Brunswick County is reduced from 630,000 kgals (one kgal equals 1,000 gallons) to 560,000 kgals (close to the actual amount purchased from Brunswick County in 2015). However, it should be noted that 2015 represented a very wet year which would cause water sales to be lower than normal. Furthermore, over the past ten years, increases in water purchases from Brunswick County (exclusive of Brunswick Forest, which left H2GO's service area in 2011) have averaged approximately 4% per year.

Appendix A - ADDITIONAL SCHEDULES FROM MODEL regarding Scenario 2: Build WTP

H2GO Financial Planning and Rate Model Revenue Sufficiency & Debt Service Coverage Calculation WATER	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026
Water Revenues											
Availability Charges											
Water	$ 1,515,775	$ 1,515,775	$ 1,571,859	$ 1,630,018	$ 1,690,328	$ 1,752,871	$ 1,817,727	$ 1,884,983	$ 1,954,727	$ 2,027,052	$ 2,068,302
Irrigation	$ 568,520	$ 568,520	$ 589,555	$ 611,369	$ 633,990	$ 657,447	$ 681,773	$ 706,998	$ 733,157	$ 760,284	$ 775,756
	$ 2,084,295	$ 2,084,295	$ 2,161,414	$ 2,241,387	$ 2,324,318	$ 2,410,318	$ 2,499,500	$ 2,591,981	$ 2,687,884	$ 2,787,336	$ 2,844,058
Usage Charges											
Water	$ 1,734,121	$ 1,798,283	$ 1,864,819	$ 1,933,818	$ 2,005,369	$ 2,079,568	$ 2,156,512	$ 2,236,303	$ 2,319,046	$ 2,404,851	$ 2,453,789
Irrigation	$ 484,185	$ 502,100	$ 520,678	$ 539,943	$ 559,921	$ 580,638	$ 602,122	$ 624,400	$ 647,503	$ 671,460	$ 685,125
	$ 2,218,306	$ 2,300,383	$ 2,385,497	$ 2,473,761	$ 2,565,290	$ 2,660,206	$ 2,758,633	$ 2,860,703	$ 2,966,549	$ 3,076,311	$ 3,138,914
Subtotal: Water Revenues from Rates	**$ 4,302,601**	**$ 4,384,679**	**$ 4,546,912**	**$ 4,715,148**	**$ 4,889,608**	**$ 5,070,524**	**$ 5,258,133**	**$ 5,452,684**	**$ 5,654,433**	**$ 5,863,647**	**$ 5,982,972**
% Change	*3.0%*	*1.9%*	*3.7%*	*3.7%*	*3.7%*	*3.7%*	*3.7%*	*3.7%*	*3.7%*	*3.7%*	*2.0%*
Other Revenues											
Other Revenues	$ 397,411	$ 407,408	$ 408,156	$ 408,931	$ 409,735	$ 410,569	$ 411,434	$ 412,331	$ 413,261	$ 414,225	$ 414,775
Applied fund balance water	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Subtotal: Water Offsets	$ 397,411	$ 407,408	$ 408,156	$ 408,931	$ 409,735	$ 410,569	$ 411,434	$ 412,331	$ 413,261	$ 414,225	$ 414,775
Total Water Revenues	**$ 4,700,013**	**$ 4,792,087**	**$ 4,955,068**	**$ 5,124,079**	**$ 5,299,343**	**$ 5,481,093**	**$ 5,669,567**	**$ 5,865,014**	**$ 6,067,694**	**$ 6,277,872**	**$ 6,397,747**
Water Revenue Requirements											
O&M Budget											
Water Distribution	$ 2,718,678	$ 2,600,207	$ 2,773,477	$ 2,378,014	$ 1,915,310	$ 1,980,101	$ 2,047,250	$ 2,116,850	$ 2,188,996	$ 2,263,788	$ 2,331,137
Administration	$ 1,200,481	$ 1,237,553	$ 1,275,896	$ 1,315,470	$ 1,356,319	$ 1,398,483	$ 1,442,007	$ 1,486,937	$ 1,533,320	$ 1,581,205	$ 1,630,644
Subtotal: Water O&M	$ 3,919,159	$ 3,837,760	$ 4,049,373	$ 3,693,485	$ 3,271,628	$ 3,378,583	$ 3,489,257	$ 3,603,786	$ 3,722,316	$ 3,844,993	$ 3,961,781
% Change	*5.9%*	*-2.1%*	*5.5%*	*-8.8%*	*-11.4%*	*3.3%*	*3.3%*	*3.3%*	*3.3%*	*3.3%*	*3.0%*
Capital Outlay											
Water Distribution	$ -	$ -	$ -	$ -	$ -	$ -	$ 8,571	$ 8,571	$ 8,571	$ 8,571	$ 8,571
Administration	$ 35,733	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
	$ 35,733	$ -	$ -	$ -	$ -	$ -	$ 8,571	$ 8,571	$ 8,571	$ 8,571	$ 8,571
Debt Service	$ -	$ -	$ 300,000	$ 1,053,351	$ 1,519,495	$ 1,519,796	$ 1,520,105	$ 1,520,421	$ 1,520,745	$ 1,521,077	$ 1,521,418
Transfer to Reserves	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Total Water Revenue Requirements	**$ 3,954,892**	**$ 3,837,760**	**$ 4,349,373**	**$ 4,746,836**	**$ 4,791,124**	**$ 4,898,380**	**$ 5,017,933**	**$ 5,132,779**	**$ 5,251,632**	**$ 5,374,642**	**$ 5,491,770**
% Change	*5.8%*	*-3.0%*	*13.3%*	*9.1%*	*0.9%*	*2.2%*	*2.4%*	*2.3%*	*2.3%*	*2.3%*	*2.2%*
Water Surplus (Shortfall)	**$ 745,121**	**$ 954,327**	**$ 605,695**	**$ 377,243**	**$ 508,220**	**$ 582,713**	**$ 651,634**	**$ 732,236**	**$ 816,062**	**$ 903,230**	**$ 905,977**
Debt Service Coverage Ratio			**4.29**	**1.74**	**1.61**	**1.68**	**1.74**	**1.81**	**1.88**	**1.95**	**1.97**

The water fund is generating excess revenues and these don't even include the capital recovery or impact fees.

Fund Balances for Scenario 2: Build WTP

H2GO Financial Planning and Rate Model Fund Balance	FY 2016 (1)	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026
Unrestricted Funds											
Beginning Fund Balance	$ 16,992,725	$ 17,632,971	$ 11,373,481	$ 11,101,325	$ 10,755,413	$ 13,020,399	$ 15,529,476	$ 18,288,381	$ 21,429,480	$ 24,841,117	$ 25,465,389
Transfer from water rates											
Transfer from sewer rates											
Water Offsets to fund reserves (capital rec. fees, impact fee	$ 805,850	$ 835,204	$ 865,644	$ 897,210	$ 929,945	$ 963,890	$ 999,091	$ 1,035,595	$ 1,073,450	$ 1,095,040	
Sewer Offsets to fund reserves (capital rec. fees, impact fee	$ 710,000	$ 735,808	$ 762,570	$ 790,322	$ 819,102	$ 848,946	$ 879,895	$ 911,988	$ 945,269	$ 964,251	
Applied for water											
Applied for sewer											
Applied for water CIP		$ (5,690,900)	$ (917,500)	$ (2,422,500)	$ (48,500)	$ (48,500)	$ -	$ -	$ -	$ (3,000,000)	
Applied for sewer CIP		$ (3,039,470)	$ (1,574,500)	$ (17,500)	$ (17,500)	$ (17,500)					
Surplus/(Shortfall from water rates)	$ 745,121	$ 954,327	$ 605,695	$ 377,243	$ 508,220	$ 582,713	$ 651,634	$ 732,236	$ 816,062	$ 903,230	$ 905,977
Surplus/(Shortfall from sewer rates)	$ (104,875)	$ 703	$ 43,137	$ 88,631	$ 135,233	$ 243,317	$ 294,435	$ 529,877	$ 647,992	$ 702,322	$ 707,550
Ending Fund Balance	$ 17,632,971	$ 11,373,481	$ 11,101,325	$ 10,755,413	$ 13,020,399	$ 15,529,476	$ 18,288,381	$ 21,429,480	$ 24,841,117	$ 25,465,389	$ 29,138,207

(1) Source: Audited financial statements for the fiscal year ending June 30, 2015. Represents the "unrestricted" fund balance on page 17.

Assume all revenues from capacity fees and impact fees go into reserve fund to fund capital projects. These are also available to pay for debt service if needed.